GR-586 LSSGR: Call Forwarding Subfeatures, FSD 01-02-1450 (A Module of LSSGR, FR-64), Issue 2, April 2002 (replaces TR-TSY-000586 Issue 1 & GR-586 Issue 1).

Call Forwarding - Busy Line or Don't Answer - Customer Control of Forward-To Number (1049)

This capability provides the ESP's client with the ability to change the Forward To number for Call Forwarding Busy Line by dialing an access code in the form of *XX, and to change the Forward-To number for Call Forwarding Don't Answer by dialing another access code, also in the form of *XX. Limitations may apply, depending on the type of switching system serving the client.

| Generic Name of ONA Service | Product Name | BSE or CNS |
|---|--|------------|
| Call Forwarding - Busy Line or Don't Answer- Customer Control of Forward To Number | AM - Customer Control of Busy Line Transfer or Alternate Answering | CNS |
| | PB - Call Forwarding Busy Line/Don't Answer Programmable | CNS |
| | Qwest - Call Forwarding BL, Customer Programmable | CNS |
| | Qwest - Call Forwarding DA, Customer Programmable | CNS |

FEATURE OPERATION:

This feature can be controlled (activated or deactivated) by the customer in two ways.

- 1. The customer dials an activation code and the remote DN or the deactivation code (i.e., Ameritech, Pacific Bell and Qwest). The codes are in the same format as Call Forwarding Variable (*XX).
 - Customer control of Call Forwarding Busy Line/Don't Answer is a central office software capability that allows a subscriber to have an incoming call redirected to another Directory Number (DN) if the number dialed (the subscriber's number) is in a busy condition or is not answered. The service is activated by the subscriberdialing an activation code, much in the same manner as Call Forwarding Variable, and entering the remote number that calls will be forwarded to. The called number and the redirected number do not have to be in the same switch. The service and forwarded-to number are deactivated by dialing the deactivation code.
- 2. The customer dials an access number (e.g., an 800 number or a regular NPANXX-XXXX number from any station (i.e., NYNEX). An announcement is returned asking for the customer directory number and a security code. If the dialed directory number and security code match and the customer subscribes to CFBL, a prompt to select the feature (e.g., CFBL/DA) and the specific action (e.g., activation or deactivation) is returned. After making his change the customer can wait for a confirmation or use, at any time, the verify capability to determine the feature status and the forward to number.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

| Switch Type | 1A ESS | 5ESS | DMS-100 |
|--------------------------|-----------|--------|---------|
| Earliest Generic Release | 1AE10.09* | 5E2(2) | BCS27 |

- * References to switching system generics that have not yet been released by the vendors are based on our current information about which features are planned for inclusion in those generic releases. If the vendors change the availability of any features for future generic releases that are referenced in this document, the availability of some services may be affected.
- 2. Multiline customers can have CFBL/DA Customer Control on each line if desired.

3. The maximum number of digits that can be programmed are: 1A ESS- 16 digits

5ESS - 24 digits

DMS-100 - 24 digits

4. Subscribers may have CFBL with CFDA, Call Forwarding Variable (CFV), and Call Waiting (CW). If a station has CFV and CFBL or CFDA active, then CFV will override the CFBL and/or CFDA features. In the 1A ESS Call Waiting takes precedence and does not interact with CFBL. Un-answered Call Waiting calls do not revert to CFDA in either the 1A ESS or the 5ESS.

5. References:

 GR-586 LSSGR: Call Forwarding Subfeatures, FSD 01-02-1450 (A Module of LSSGR, FR-64), Issue 2, April 2002 (replaces TR-TSY-000586 Issue 1 & GR-586 Issue 1).

Call Forwarding Don't Answer After Call Waiting (CFDA After CW) (1093)

Call Forwarding Don't Answer After Call Waiting is a central office software capability that allows a client to utilize the Call Forwarding Don't Answer (CFDA) feature even though the client's line is also equipped with Call Waiting (CW).

CFDA/CW interaction was initially designed for CW to be dominant over CFDA. For a busy line equipped with both features (CFDA and CW), receiving an incoming call invoked the CW tone, but did not transfer to the CFDA forwardto number. This resulted in the CFDA feature being effective only when the line was not busy and not answered.

This capability improves the call waiting feature by allowing subscribers with the call waiting feature to specify the way an incoming call is to be treated when a call comes in while the subscriber is currently involved in a call with another party. When the call waiting tone is heard, the subscriber has the following options:

- initiate the standard call-waiting options (ignore, flash to put the existing call on hold and answer the second call, flash to go back to the first call, etc.)
- · forward the call to another preselected directory number.

The busy and call forwarding options are selected by the subscriber pressing the appropriate key on a DTMF telephone set.

| Generic Name of ONA Service | Product Name | BSE or CNS |
|---|--|------------|
| Call Forwarding Don't Answer After Call Waiting | AM - Alternate Answer After Call Waiting | CNS |
| | AM - Call Forwarding With Call Waiting | CNS |
| | BA – Fixed CF, CFDA | CNS |
| | BA Fixed Call Forwarding | CNS* |
| | BS - Call Forwarding Don't Answer | CNS* |
| | NX – CFBL, CFDA, CFBL/DA | CNS* |
| | PB - Modification of Call Waiting | CNS |
| | Qwest - Call Waiting | CNS |

FEATURE OPERATION:

The new feature interaction allows a client to subscribe to both CFDA and CW, and receive the benefits of both features. An incoming call to a busy line will invoke the CW tone. The client can place the existing call on hold and asswer the call, or by not answering the call, can allow the CFDA feature to assume control of the new call and transfer it to the CFDA forward-to number.

^{*} This capability is inherent with Call Forwarding Don't Answer in Switches which have been modified. Check wire center deployment report for availability.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

| Switch Type | 1A ESS | 5ESS | DMS-100 |
|--------------------------|----------|------|---------|
| Earliest Generic Release | 1AE10.11 | 5E7 | BCS32 |

- 2. This feature is activated on an office basis. The AT&T switches (1A ESS and 5ESS) have a line-by-line override parameter to accommodate any customer situations where the capability may not be desired.
- 3. In the DMS-100 switch, the feature only affects those CFDA and CW customers served by RES. There is no line by-line override parameter in the DMS-100 switch.
- 4. The line specific CFDA features (number of rings, inter/intraoffice forwarding) will operate the same as though the line were on-hook and not answered.
- 5. Standard CFDA and CW operation applies.
- 6. References:
 - GR-571 LSSGR: Call Waiting, FSD-01-02-1201 (A Module of LSSGR, FR-64), Issue 1 June 2000 (replaces TR-TSY-000571 Issue 1 & Revision 1 no technical changes) [includes CFDA interaction]

Call Forwarding - Don't Answer Intraswitch (1050)

Call Forwarding Don't Answer (CFDA) is a central office software capability that allows a client to have an incoming call redirected to another Directory Number (DN) if the number dialed (the client's number) is not answered after a user-specified number of rings (or time interval). The service is activated by a service order. The called number and the redirected number (forwarded-to number) are coded in the central office memory and can only be changed through a service order. The customer may specify the number of rings (or time interval) at the time of the service order. The customer has the option of answering the call prior to its being forwarded, as long as the call is answered within the ringing cycle (time interval) selected. The called number and the redirected number (forwarded-to number) must be in the same central office switch. The service is deactivated, the forwarded-to number changed, or the number of rings (time interval) is changed only by a service order.

| Generic Name of ONA Service | Product Name | BSE or CNS |
|--|--|------------|
| Call Forwarding - Don't Answer Intraswitch | AM - Alternate Answering | CNS |
| | BA - Fixed CF, CFBL/DA | CNS |
| | BA - Fixed Call Forwarding | CNS |
| | BA - Call Forwarding Busy Line/Don't Answer | CNS |
| | BA - Fixed Call Forwarding Don't Answer | CNS |
| | BS - Call Forwarding Don't Answer | CNS |
| | NX – CFBL, CFDA, CFBL/DA | CNS |
| | PB - Call Forwarding Don't Answer | CNS |
| | SWB - Call Forwarding Don't Answer | CNS |
| | Qwest - Call Forwarding Don't Answer | CNS |
| | Qwest - Call Forwarding Busy Line/Don't Answer | CNS |

FEATURE OPERATION:

This feature is activated/deactivated by a service order. The "forward-to" number and the number of rings (time interval) is also selected and preprogrammed at the time of the service order. (Refer to the capabilities called "Call Forwarding-Busy Line or Don't Answer - Customer Control of Activation/Deactivation" and "Call Forwarding-Busy Line or Don't Answer - Customer Control of Forward-To Number" for the services with customer control.)

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

| Switch Type | 1A ESS | 5ESS | DMS-100 |
|--------------------------|--------|--------|---------|
| Earliest Generic Release | IAE8A | 5E2(2) | BCS24 |

2. Multiline customers can have CFDA on each line if desired.

- 3. Calls may be forwarded to any telephone number served by the same central office that serves the base station except DID numbers in the 1A ESS. Forwarding to DID numbers in the 1A ESS will be available in generic 1AE10.09*. (* References to switching system generics that have not yet been released by the vendors are based on our current information about which features are planned for inclusion in those generic releases. If the vendors change the availability of any features for future generic releases that are referenced in this document, the availability of some services may be affected.)
- 4. Subscribers may have CFDA with Call Forwarding Busy Line (CFBL), Call Forwarding Variable (CFV), and Call Waiting (CW). If a station has CFV and CFBL or CFDA active, then CFV will override the CFBL and/or CFDA features. If a station has CW and CFDA, CFDA will take precedence over the CW feature if the station is idle. However, if the station is busy, CW will take precedence and does not allow the CFDA feature to take effect if the waiting call is unanswered.

- SR-504 SPCS Capabilities and Features (A Module of LSSGR, FR-64), Issue 1, March 1996 (formerly TR-TSY-000504).
- GR-586 LSSGR: Call Forwarding Subfeatures, FSD 01-02-1450 (A Module of LSSGR, FR-64), Issue 2, April 2002 (replaces TR-TSY-000586 Issue 1 & GR-586 Issue I).

Call Forwarding - Don't Answer Interswitch (1051)

Call Forwarding Don't Answer (CFDA) is a central office software capability that allows a client to have an incoming call redirected to another Directory Number (DN) if the number dialed (the client's number) is not answered after a user specified number of rings (or time interval). The service is activated by a service order. The called number and the redirected number (forwarded-to number) are coded in the central office memory and can only be changed through a service order. The customer may specify the number of rings (or time interval) at the time of the service order. The customer has the option of answering the call prior to its being forwarded, as long as the call is answered within the ringing cycle (time interval) selected. The called number and the redirected number (forwarded-to number) may be in the same or a different central office switch. The service is deactivated, the forwarded-to number changed, or the number of rings (time interval) is changed only by a service order.

| Generic Name of ONA Service | Product Name | BSE or CNS |
|--|---|------------|
| Call Forwarding - Don't Answer Interswitch | AM - Alternate Answering | CNS |
| | BA – Fixed CF, CFBL/DA | CNS |
| | BA - Fixed Call Forwarding Don't Answer | CNS |
| | BA - Fixed Call Forwarding | CNS |
| | BA - Call Forwarding Busy Line/Don't Answer | CNS |
| | BS - Call Forwarding Don't Answer | CNS |
| | NX – CFBL, CFDA, CFBL/DA | CNS |
| | PB - Call Forwarding Don't Answer Interswitch | CNS |
| | SWB - Call Forwarding Don't Answer | CNS |
| | Qwest - Call Forwarding Don't Answer (Expanded) | CNS |
| | Qwest - Call Forwarding Busy Line/Don't Answer (Expanded) | CNS |

FEATURE OPERATION:

This feature is activated/deactivated by a service order. The "forward-to" number and the number of rings (time interval) is also selected and preprogrammed at the time of the service order. (Refer to the capabilities called "Call Forwarding - Busy Line or Don't Answer - Customer Control of Activation/Deactivation" and "Call Forwarding - Busy Line or Don't Answer - Customer Control of Forward-To Number" for the services with customer control.)

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

| Switch Type | IA ESS | 5ESS | DMS-100 |
|--------------------------|-----------|--------|---------|
| Earliest Generic Release | 1AE10.09* | 5E2(2) | BCS24 |

- * References to switching system generics that have not yet been released by the vendors æ based on our current information about which features are planned for inclusion in those generic releases. If the vendors change the availability of any features for future generic releases that are referenced in this document, the availability of someservices may be affected.
- 2. Multiline customers can have CFDA on each line if desired.
- 3. Calls may be forwarded to any telephone number, including DID numbers, served by the same or a different central office.

- 4. The caller may hear multiple call progress tones if the remote DN is busy.
- 5. Subscribers may have CFDA with Call Forwarding Busy Line (CFBL), Call Forwarding Variable (CFV), and Call Waiting (CW). If a station has CFV and CFBL or CFDA active, then CFV will override the CFBL and/or CFDA features. If a station has CW and CFDA, CFDA will take precedence over the CW feature if the station is idle. However, if the station is busy, CW will take precedence and does not allow the CFDA feature to take effect if the waiting call is unanswered.

- SR-504 SPCS Capabilities and Features (A Module of LSSGR, FR-64), Issue 1, March 1996 (formerly TR-TSY-000504).
- GR-586 LSSGR: Call Forwarding Subfeatures, FSD 01-02-1450 (A Module of LSSGR, FR-64), Issue 2, April 2002 (replaces TR-TSY-000586 Issue 1 & GR-586 Issue 1).

Call Forwarding - Multiple Simultaneous Calls Interswitch (1052)

This feature provides the capability to specify the number of simultaneous incoming calls to forward from the same number to a hunt group or equivalent arrangement such as DID when the forwarding number and the hunt group (or equivalent) are served by a different central office switch.

| Generic Name of ONA Service | Product Name | BSE or CNS |
|---|---|------------|
| Call Forwarding - Multiple Simultaneous Calls Interswitch | AM - Busy Line Transfer of Alternate Answer | CNS |
| | BA – Multipath Call Forwarding | CNS |
| | BS - Call Forwarding Variable Multiple Simultaneous Calls | CNS |
| | BS - CF BL/DA Multiple Simultaneous Calls | CNS |
| | NX - Call Forwarding | CNS |
| | PB - Call Forwarding Variable | CNS |
| | SWB - Simultaneous Call Forwarding | CNS |
| | Qwest - Call Forwarding Variable | CNS |

FEATURE OPERATION:

The maximum number of multiple simultaneous call forwarding is Telephone Company defined on a per line basis, and on the basis of the type of call forwarding, at the time of service order entry.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

| Switch Type | 5ESS | DMS-100 |
|--------------------------|--------|---------|
| Earliest Generic Release | 5E2(2) | BCS28 |

- 2. This capability is available for the Call Forwarding Variable (CFV), Call Forwarding Busy Line (CFBL) and Call Forwarding Don't Answer (CFDA) features.
- 3. In the 5ESS switch the number of simultaneous calls allowed can range in size from one to ninetynine. In the DMS-100 the size can range from 1 to 1024 via the Residential Enhanced Services.
- 4. In the DMS-100 switches, there may be some limitations on providing this for CFBL or CFDA depending on the current Generic program of the serving central office.
- 5. Reference for Call Forwarding Variable:
 - GR-580 LSSGR: Call Forwarding Variable, FSD 01-02-1401 (A Module of LSSGR, FR-64), Issue 1, June 2000 (replaces TR-TSY-000580 Issue 1 no technical changes).
 - GR-586 LSSGR: Call Forwarding Subfeatures, FSD 01-02-1450 (A Module of FR-64) Issue 2, April 2002 (replaces TR-TSY-000586 Issue 1 & GR-586 Issue 1).

Call Forwarding - Variable (1053)

This capability provides the ESP's client with the ability to forward all calls to a second directory number for handling. As part of the activation of the feature, an associated call is placed to the ESP's forward-to number.

| Generic Name of ONA Service | Product Name | BSE or CNS |
|-----------------------------|----------------------------------|------------|
| Call Forwarding - Variable | AM - Call Forwarding Variable | CNS |
| | BA - Call Forwarding | CNS |
| | BS - Call Forwarding Variable | CNS |
| | NX - Call Forwarding | CNS |
| | PB - Call Forwarding Variable | CNS |
| | SWB - Call Forwarding | CNS |
| | Qwest - Call Forwarding Variable | CNS |

FEATURE OPERATION:

To activate call forwarding variable with the ESP's number as the forward-to number, the ESP's client dials the call forwarding variable activation code. A recall dial tone (stutter dial tone) is provided, and then the ESP's client dials the ESP's number. When the ESP answers the call, activation is complete. (If the ESP does not answer, the customer may repeat the process within a specified amount of time, e.g., one minute, and the feature will be activated.) Depending on the type of central office switch serving the ESP's client, while call forwarding variable is active, the ESP's client's line will receive a reminder ring whenever a call is forwarded.

To deactivate the feature, the ESP's client dials the call forwarding variable deactivation code.

When call forwarding variable is active, the ESP's client's ability to originate calls will be unaffected.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

| Switch Type | 1A ESS | 5ESS | DMS-100 |
|--------------------------|--------|--------|---------|
| Earliest Generic Release | 1AE8A | 5E2(2) | BCS23 |

- 2. Call Forwarding Variable will override Call Forwarding Don't Answer and Call Forwarding Busy Line if all three features are active at the same time.
- 3. Calls may be forwarded to any telephone number including DID numbers served by the same or a different entral office.

- GR-580 LSSGR: Call Forwarding Variable, FSD 01-02-1401 (A Module of LSSGR, FR-64), Issue 1, June 2000 (replaces TR-TSY-000580 Issue 1 no technical changes).
- GR-586 LSSGR: Call Forwarding Subfeatures, FSD 01-02-1450 (A Module of LSSGR, FR-64), Issue 2, April 2002 (replaces TR-TSY-000586 Issue 1 & GR-586 Issue 1).

Call Forwarding - Variable - Activation Without Courtesy Call (1054)

This capability provides the ESP's client with the ability to activate the call forwarding variable (forward all calls) feature without completing a call to the ESP's forward-to number.

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| Generic Name of ONA Service | Product Name | BSE or CNS |
|--|---|------------|
| Call Forwarding - Variable - Activation Without Courtesy Call | AM - Call Forwarding Variable | CNS |
| | BA - Call Forwarding-Variable-Activation Without Courtesy Call | CNS |
| | BA - Call Forwarding Variable-Reminder Ring Option Inhibited | CNS |
| | BS - Remote Access - Call Forwarding Variable | CNS |
| | NX - CallAbility SM Feature Access (or Ultraforward) | CNS |
| | PB - Call Forwarding Variable | CNS |
| | Qwest - Call Forwarding Variable Without Call Completion | CNS |

FEATURE OPERATION:

To activate call forwarding variable with the ESP's number as the forward number, the ESP's client either dials the call forwarding variable activation code of the form *XX or an access number.

- 1. Dialing an activation code (i.e., Ameritech, Bell Atlantic, BellSouth, Pacific Bell and Qwest). A recall dial tone (stutter dial tone) is provided, and then the ESP's client inputs the ESP's number by dialing it. If the activation can be accomplished for the designated forward to address, then the switch responds with confirmation tone.
- 2. Dialing an Access Number (i.e., NYNEX). The customer dials an access number (e.g., an 800 number or a regular NPA-NXX-XXXX number) from any station. An announcement is returned asking for the customer directory number and a security code. If the dialed directory number and security code match and the customer subscribes to the service a prompt to select the feature (e.g., CFV) and the specific action (i.e., activation) is returned. After making the change the customer can wait for a confirmation or use, at any time, the verify capability to determine the feature status and forward to number.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

| Switch Type | 5ESS |
|--------------------------|---------|
| Earliest Generic Release | 5E2(2)* |

* Requires Business and Residence Custom Service (BRCS).

2. When call forwarding variable is active, the ESP's client's ability to originate calls will be unaffected.

SM Call Ability is a registered service mark of NYNEX. Call Ability will be offered from selected digital switches.

UPDATED 1/31/10

- GR-586 LSSGR: Call Forwarding Subfeatures, FSD 01-02-1450 (A Module of LSSGR, FR-64), Issue 2, April 2002 (replaces TR-TSY-000586 Issue 1 & GR-586 Issue 1)
- GR-580 LSSGR: Call Forwarding Variable FSD 01-02-1401 (A Module of LSSGR, FR-64), Issue 1, June 2000 (replaces TR-TSY-000580 Issue 1 no technical changes).

Call Forwarding - Variable - Remote Activation/Control (1055)

This capability gives the ESP's client the ability to activate or deactivate the call forwarding variable (forward all calls) feature from remote locations other than their base station. The signaling used to activate or deactivate the call forwarding feature from the remote location must be from a Dual Tone Multi Frequency (DTMF) set.

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| Generic Name of ONA Service | Product Name | BSE or CNS |
|---|---|------------|
| Call Forwarding - Variable - Remote Activation/Control | AM - Call Forwarding - Variable - Remote Activation/Control | CNS |
| | BA - Ultra Forward | CNS |
| | BS - Remote Activation of Call Forwarding | CNS |
| | NX - CallAbility SM Feature Access (or Ultraforward) | CNS |
| | PB - Call Forwarding-Variable-Remote Activation/Control | CNS |
| | SWB - Remote Activation of Call Forwarding | CNS |
| | Qwest - Remote Access Forwarding | CNS |

FEATURE OPERATION:

The ESP's client has two options for changing the forward to number from a remote station:

- 1. The remote activation of call forwarding variable feature provides a dedicated directory number that can be used for remote activation (i.e., Ameritech, Bell Atlantic, BellSouth, Pacific Bell, Southwestern Bell). A caller may place a call to this remote activation directory number from any station. Calls to this number are answered with a tone or announcement. The caller then dials, on a DTMF station from his/her remote location,his/her home (base station) directory number and a security code. If the dialed directory number and security code match and that customer subscribes to remote activation, confirmation tone followed by dial tone is returned. The customer then proceeds through the call forwarding activation/deactivation procedure as if at home (at the base station).
- 2. Dialing an Access Number (i.e., NYNEX, Qwest). The customer dials an access number (e.g., an 800 number or a regular NPA-NXX-XXXX number) from any station. An announcement is returned asking for the customer directory number and a security code. If the dialed directory number and security code match and the customer subscribes to remote activation, a prompt to select the feature (e.g., CFV) and the specific action (e.g., activation or deactivation) is returned. After entering their selection, the customer can wait for a confirmation or use, at any time, the verify capability to determine the feature status and the forward to number.

SM CallAbility is a registered service mark of NYNEX. CallAbility will be offered from selected digital switches.

UPDATED 1/31/10

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

| Switch Type | 1A ESS* | 5ESS* | DMS-100* |
|--------------------------|---------|-------|----------|
| Earliest Generic Release | 1AE10 | 5E5 | BCS28 |

Note: * This service may be provided via a switching feature in the switchor via an adjunct processor.

2. Reference:

• SR-504 SPCS Capabilities and Features (A Module of LSSGR, FR-64), Issue 1, March 1996 (formerly TR-NWT-000504)

Call Forwarding With Variable Rings (1102)

In the event that the called telephone number is not answered within a designated parameter, normally three to four rings, the Call Forwarding Don't Answer feature automatically forwards incoming calls to a predetermined, dialable telephone number served by the same central office switch, or provides interswitch forwarding to a predetermined, dialable telephone number. This feature provides the ability to change the operative number of rings prior to call forwarding.

| Generic Name of ONA Service | Product Name | BSE or CNS |
|-------------------------------------|---|------------|
| Call Forwarding With Variable Rings | AM - Customer Changeable Number of Rings | CNS |
| | BA - Call Forwarding With Variable Rings | CNS |
| | NX - CallAbility SM Feature Access (or Ultraforward) | CNS |

FEATURE OPERATION:

This feature is modified on a line basis by a service order. The number of rings (time interval) is selected at the time of the service origination or at any time the customer requests a change.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

| Switch Type | 1A ESS | 5ESS | DMS-100 |
|--------------------------|----------|------|---------|
| Earliest Generic Release | 1AE11.03 | 5E6 | BCS 29 |

2. The minimum and maximum number of rings (time interval) is limited on a per switch basis. The normal time range is 0 to 60 seconds.

3. Reference:

• GR-1520 Ring Control, FSD 01-02-2200, Issue 2, October 1994 (component of FR-64).

SM CallAbility is a registered service mark of NYNEX. CallAbility will be offered from selected digital switches.

UPDATED 1/3 1/10

Call Waiting - Cancel (1056)

Cancel Call Waiting allows a subscriber with the Call Waiting feature to inhibit reception of the Call Waiting Tone for the duration of a single call. This prevents interruption of data traffic or interruption during an important telephone call.

| Generic Name of ONA Service | Product Name | BSE or CNS |
|-----------------------------|---------------------------|------------|
| Call Waiting - Cancel | AM - Call Waiting | CNS |
| | BA - Tone Block | CNS |
| | BA - Call Waiting | CNS |
| | BS - Call Waiting | CNS |
| | NX - Cancel Call Waiting | CNS |
| | PB - Call Waiting | CNS |
| | SWB - Cancel Call Waiting | CNS |
| _ | Qwest - Call Waiting | CNS |

FEATURE OPERATION:

- 1. When a subscriber with the Call Waiting Feature wishes to cancel the Call Waiting feature during the call, they must depress the receiver button, listen for dial tone, and dial Star (*) plus 70 for touchtone (DTMF) phones or dial 1170 for rotary dial (DP) phones (Cancel Call Waiting Code) for a POTS line or a Business Group line. After dialing the code, the subscriber listens for confirmation tone and is then automatically reconnected to the call in progress. The Call Waiting feature has then been deactivated and no interruptions are allowed during the call.
- 2. When a subscriber with the Call Waiting Feature wishes to cancel the Call Waiting Feature prior to making a call, they must lift the receiver, listen for dial tone, and dial Star (*) plus 70 for touchtone (DTMF) phones or dial 1170 for rotary (DP) phones (Caneel Call Waiting Code) for a POTS line or a Business Group line. After dialing the code, the subscriber listens for confirmation tone followed by dial tone. The Call Waiting Feature has then been deactivated and no interruptions are allowed during the call.
- 3. Call Waiting will be re-established when the call is terminated.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

| Switch Type | 1A ESS | 5ESS | DMS-100 |
|--------------------------|--------|--------|---------|
| Earliest Generic Release | 1AE8A | 5E2(2) | BCS24 |

- 2. Call Forwarding Variable is compatible with Call Waiting and Cancel Call Waiting service.
- 3. Call Hold and Call Waiting with the Cancel option can be assigned to the same line.

- 4. Call Pickup and Call Waiting with the Cancel option ean be assigned to the same line.
- 5. Speed Calling and Call Waiting with the Cancel option can be assigned to the same line.
- 6. Call Waiting with the Cancel option may be assigned to either or both parties on a Two-Party Line.
- 7. Cancel Call Waiting may not be provided on the following lines:
 - · Coin Lines
 - · Denied Originating Lines
 - · Four and Eight Party Lines
 - PBX Lines
 - · Hotel/Motel Calls Routed to TSPS

• GR-572 LSSGR: Cancel Call Waiting, FSD 01-02-1204 (A Module of LSSGR, FR-64), Issue 1, June 2000 (replaces TR-TSY-000572 Issue 1 & Revision 1 – no technical changes).

Called Directory Number Delivery via DID (1057)

This service allows the central office switch to deliver all or part of the destination address to the ESP at the time the call is established. Usually, the destination address delivered is the same as the number originally dialed. When number translations have occurred, e.g., 800 calls, the DID number delivered is not the called number.

| Generic Name of ONA Service | Product Name | BSE or CNS |
|--|--|------------|
| Called Directory Number Delivery via DID | AM - Direct Inward Dialing Trunk Termination | BSE |
| | BA - Direct Inward Dialing Service | BSE |
| | BS - Direct Inward Dialing | BSE |
| | NX – DID, DNIS on 800 | BSE or CNS |
| | PB - Direct Inward Dial Service | BSE |
| | SWB - Direct Inward Dialing | BSE |
| _ | Qwest - Called Directory Number Delivery (DID) | BSE |

FEATURE OPERATION:

- 1. Customers order this service from the telephone company. A client calling a customer is generally unaware that the customer has Direct Inward Dialing (DID) service. The client is not required to perform any additional actions to have the call delivered via a DID trunk group.
- 2. In a PBX type application, the service allows a client to reach a specific PBX station without the assistance of an attendant or other intermediary.
- 3. The number of digits forwarded by the central office switch is determined at the time the service is ordered. The customer must also arrange for a block of telephone numbers to be associated with the DID trunks.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

| Switch Type | 1A ESS | 5ESS | DMS-100 |
|--------------------------|--------|--------|---------|
| Earliest Generic Release | IAE8A | 5E2(2) | BCS17 |

- 2. A customer may elect to receive Dial Pulse or Dual Tone Multifrequency (DTMF) signaling when using analog facilities. Some companies may offer Multifrequency (MF) outpulsing/signaling to the ESP community. If both the central office switch and the customer's equipment are digital, the customer may be able to order DID trunks with digital connectivity.
- 3. This service is an incoming service (to the customer's CPE) and is typically a "trunk side" service.

• GR-524 LSSGR: Attendant and Customer Switching System Features and Customer Interfaces, FSD 04-01-0000 through 04-05-0000 (A Module of LSSGR, FR-64), Issue 1, June 2000 (replaces TR-TSY-000524 Issue 2 & Revision 1 – no technical changes).

This service, if offered as a BSE, may be associated with the Circuit Switched Line or Trunk basic serving arrangement, as stated in the individual ONA plans.

Called Directory Number Delivery via 900NXX (1059)

This capability will provide the ESP with the directory number that terminated the call via a circuit swithed trunk access arrangement. The method used is 900NXX dialing and Feature Group D (FG D) signaling protocol. The called directory number information (900NXXXXXX) is included within the FG D signaling protocol. The assignment of a 900NXX number to each ESP provides the ESP the capability to assign up to 9999 line numbers. With this capability, the FG D signaling protocol would deliver the specific dialed line number (900NXXXXXXX) to the ESP.

| Generic Name of ONA Service | Product Name | BSE or CNS |
|---|--|------------|
| Called Directory Number Delivery via 900NXX | AM - Called Directory Number Delivery | BSE |
| | BA - 900 Access Service | BSE |
| | NX - 900 Access Service | BSE |
| | SWB - Circuit Switched - Trunk Side Alternative D Basic Serving Arrangement (BSA-D) | BSA * |

FEATURE OPERATION:

This feature is activated/deactivated by an Access Service Order.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

| Switch Type | 1A ESS | 5ESS | DMS-100 |
|--------------------------|--------|--------|---------|
| Earliest Generic Release | 1AE8A | 5E2(2) | BCS17 |

- 2. The service is LATA wide and can be accessed either at the tandem or at the end office. Both access arrangements must be properly equipped with Feature Group D protocol trunks to the 900NXX serving carrier.
- Calls that originate from non-FG D protocol offices will be handed off to the ESP at the access tandem using the FG D protocol.

4. References:

- Feature Group D protocol is described in GR-690 Exchange Access Interconnection FSD 20-24-0000 (A Module of LSSGR, FR-64), Issue 2, September 1995, Revision 1 - November 1996.
- GR-334 Switched Access Service: Transmission Parameter Limits and Interface Combinations, Issue 1, July 1994.

This service is associated with the Circuit Switched Trunk basic serving arrangement.

For Southwestern Bell Telephone Company, this is an inherent feature of Circuit Switehed-Trunk Side Alternative D Basic Serving Arrangement (BSA-D) service.

Calling Billing Number Delivery - FG B Protocol (1060)

This arrangement allows the ESP to receive the billing number (ANI-7 digit) of the party who originated the call to the ESP with the signaling information that is transmitted to the ESP during call setup. This signaling information will be transmitted using a Feature Group B protocol over a direct circuit switched trunk side connection.

| Generie Name of ONA Service | Product Name | BSE or CNS |
|--|--|------------|
| Calling Billing Number Delivery - FG B Protocol | BA - Automatic Number Identification (ANI) | BSE |
| | BS - Called/Calling Number Information - ANI Via FG B/TSBSA Technical Option 1 | BSE |
| | NX - Automatic Number Identification | BSE |
| | Qwest - Automatic Number Identification | BSE |

FEATURE OPERATION:

- 1. An ESP's client will dial (1)+950+0XXX or (1)+950+1XXX to reach the ESP. The XXX is the ESP's Carrier Identification Code (CIC).
- 2. ESP equipment may need to prompt the end user (e.g., via second dial tonc) for additional information inorder for the ESP to process the call.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

| Switch Type | 1A ESS | 5ESS | DMS-100 |
|--------------------------|--------|--------|---------|
| Earliest Generic Release | 1AE8A | 5E2(2) | BCS19 |

- 2. ESPs that purchase trunk side access service utilizing FG B protocol will be assigned a Carrier Identification Code (CIC) and must establish a Point of Presence (POP) in each LATA served. The CIC code will be the same for both FG B protocol and FG D protocol. However, in the future, CIC codes for trunk side access services utilizing FG B protocol and FG D protocol may be assigned independently.
- 3. ESPs must order direct trunks between each FG B protocol end office switch they wish to serve and their POP. The ANI optional feature must be ordered on all trunks. (Calling Billing Number Delivery- FG B Protocol cannot be provided using tandem arrangements, as the tandems utilizing FG B protocol do not have the ability to pass ANI.)
- 4. The ANI data forwarded to the ESP consists of the seven (7) digit billing number of the station originating the call and one ANI information digit.

BellSouth will only offer this service on an interLATA basis.

- 5. Destination code information, such as the called number, may be transmitted to the ESP from rotary stations provided the ESP orders the Rotary Dial Station Signaling option. This feature is available only from suitably equipped end offices.
- 6. Calls may be forwarded to ESPs using call forwarding services.
- 7. This service may be available in other switches equipped for Equal Access service.

- GR-698 LSSGR: Feature Group B FSD 20-24-0300 (A Module of LSSGR, FR-64), Issue 1, June 2000 (replaces TR-TSY-000698 Issue 1 & Revision 1 no technical changes).
- TR-NPL-000175 Compatibility Information for Feature Group B Switched Access Service, Issue 1, July 1985. [No longer listed.]
- GR-334 Switched Access Service: Transmission Parameter Limits and Interface Combinations, Issue 1, July 1994.

Calling Billing Number Delivery - FG D Protocol (1061)

This arrangement allows the ESP to receive the billing number (ANI- 10 digit) of the party who originated the call to the ESP with the signaling information that is transmitted to the ESP during call setup. This signaling information will be transmitted using a Feature Group D protocol over a circuit switched trunk side connection.

| Generic Name of ONA Service | Product Name | BSE or CNS |
|--|--|------------|
| Calling Billing Number Delivery - FG D Protocol | AM - Calling Billing Number Delivery (i.e., ANI) | BSE |
| | BA - Automatic Number Identification (ANI) | BSE |
| | BS - ANI | BSE |
| | NX - Automatic Number Identification | BSE |
| | PB - Automatic Number Identification | BSE |
| | SWB - Automatic Number Identification | BSE |
| | Qwest - Automatic Number Identification | BSE |

FEATURE OPERATION:

An ESP's client that is presubscribed to that ESP will dial (1) + 7/10 digits to reach the ESP. If the ESP's client chooses another carrier as his/her presubscribed carrier, the ESP's client would dial 10XXX (and/or 101XXXX) + (1) + 7/10 digits or 10XXX (and/or 101XXXX)+# to reach the ESP. The XXX (and/or XXXX) would be the ESP's Carrier Identification Code (CIC).

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

- ESPs that purchase trunk side access service utilizing FG D protocol will be assigned a Carrier Identification Code (CIC) and must establish a Point of Presence (POP) in each LATA served.
- 2. ESPs may order (1) direct trunks between each equal access switch and the ESP's POP, or (2) trunks between FG D protocol equal access tandems and the ESP's POP, or (3) a combination of direct and tandem trunks. The trunks must be ordered with the ANI feature where ANI is an optional feature, in order or the ESP to receive the calling billing number.
- 3. Calls may be forwarded to the ESP using call forwarding services.
- 4. This feature is available in the following central office switches:

| Switch Type | 1A ESS | 5ESS | DMS-100 |
|--------------------------|--------|--------|---------|
| Earliest Generic Release | 1AE8A | 5E2(2) | BCS19 |

5. The service may be available in other switches equipped for Equal Access service.